$$R^1-(-\boxed{A^{11}}-Z^{11}-)_n-(-\boxed{A^{12}}-Z^{12}-)_m-\boxed{A^{13}}-Z^{13}-\boxed{O}-X$$

with F at top and Y at bottom of the last ring

I

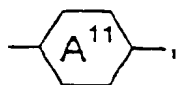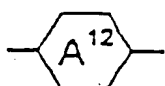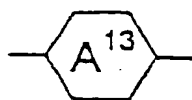()

in which

R^1 is alkyl or alkoxy having 1 to 7 carbon atoms, alkoxyalkyl, alkenyl or alkenyloxy having 2 to 7 carbon atoms,

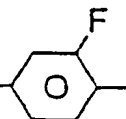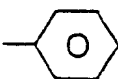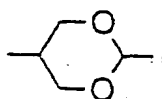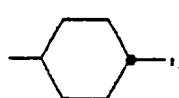Z^{11}, Z^{12} and Z^{13} are each, independently of one another, $-CH_2-CH_2-$, $-CH=CH-$, $-C\equiv C-$, $-COO-$ or a single bond,

$-\boxed{A^{11}}-$,   and $-\boxed{A^{13}}-$
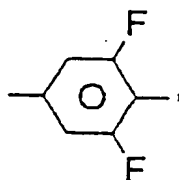
$-\boxed{A^{12}}-$

C_1

cont.

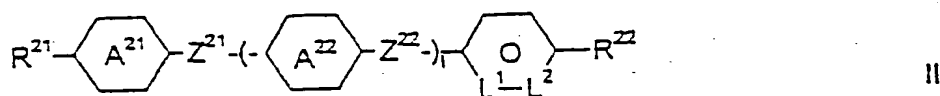are each, independently of one another,

or

X   is F, or OCF_3, where, in the case where X = F, Y is F, and in the case where X = OCF_3, Y is H or F, and

n and m   are each, independently of one another, 0 or 1;

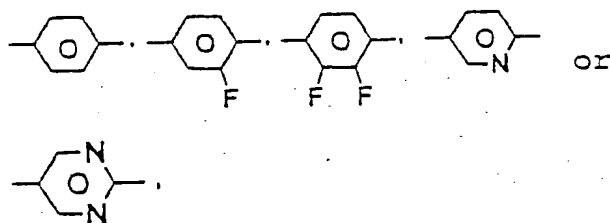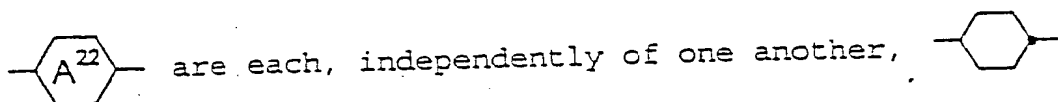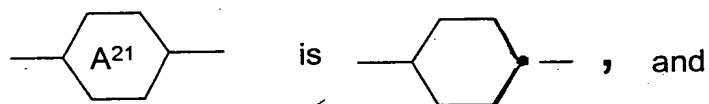b)   one or more dielectrically negative compound(s) of the formula II

II

in which

R^{21} and R^{22} are each, independently of one another, as defined for R^1 under the formula I,

Z^{21} and Z^{22} are each, independently of one another, as defined for Z^{11} above under the formula I,

is

, and

are each, independently of one another,

or
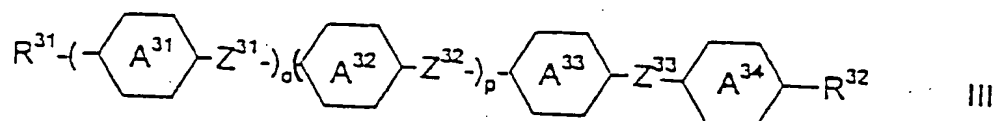
L^1 and L^2 are both C-F or one of the two is N and the other is C-F, and

l is 0 or 1;

and optionally

c) one or more dielectrically neutral compound(s) of the formula III

$$R^{31}-(\!\!\boxed{A^{31}}\!\!-Z^{31}-)_o(\!\!\boxed{A^{32}}\!\!-Z^{32}-)_p-\!\!\boxed{A^{33}}\!\!-Z^{33}-\!\!\boxed{A^{34}}\!\!-R^{32} \qquad III$$
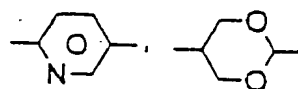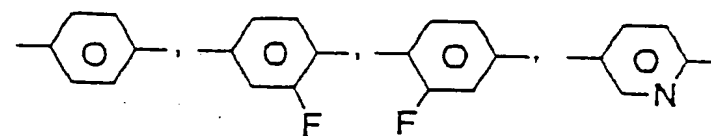
in which

R^{31} and R^{32} are each, independently of one another, as defined for R^1 above under the

formula I, and

Z^{31}, Z^{32} and Z^{33} are each, independently of one another, $-CH_2CH_2-$, $-CH_2O-$, $-OCH_2-$, -

CF_2O-, $-OCF_2-$, $-COO-$ or a single bond, and, additionally, one of Z^{31}, Z^{32} and Z^{33} may also be -
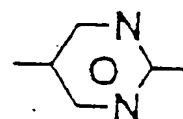
CF_2CF_2-,

$-\!\!\boxed{A^{31}}\!\!-$,

$-\!\!\boxed{A^{32}}\!\!-$,

$-\!\!\boxed{A^{33}}\!\!-$ and

$-\!\!\boxed{A^{34}}\!\!-$ are each, independently of one another,

MERCK-2073

4
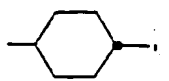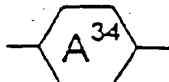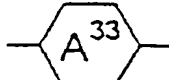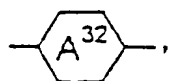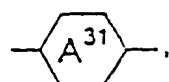
o and p,   independently of one another, are 0 or 1,

wherein the medium has a positive dielectric anisotropy and a birefringence, Δn, of less

than or equal to 0.11.

C_1

cont.